

# SHOWERS

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**OVERVIEW: SHOWERS****Ideal for: cleaning, coating, moisturizing and more**

- Easily retrofit from manually operated showers to affordable automated versions
- Find solutions for reducing nozzle plugging and easier maintenance
- A spray controller can be added to any of our showers to optimize spray nozzle performance, lower operating costs and automate operation

**MORE SOLUTIONS:**

We manufacture an extensive line of showers. If you don't see exactly what you need, be sure to contact us. We custom design showers and modify existing designs for customers daily.

**SHOWER OPTIONS****Automatic Brush Shower**

- Affordable, automated solution eliminates the manual rotation of handwheels for improved worker safety
- An internal rotating brush assembly scrubs the interior wall of the shower as well as each disc-type shower nozzle orifice to prevent clogging and help ensure long nozzle wear life – ideal for all brush-type showers up to 3" in diameter
- Easy operation. Cleaning cycles occur automatically when used with the programmable timer. If not, activation requires a simple push of a button
- In just a few seconds, debris is swept away through the flush-out valve, restoring full liquid flow to the system without contaminating the sprayed surface
- Virtually maintenance free, aside from gear lubrication twice a year
- Straightforward and easy retrofit solution – a field brush header can be retrofitted from a manual wheel to automatic operation in as little as seven minutes

**PulsaJet® Manifold**

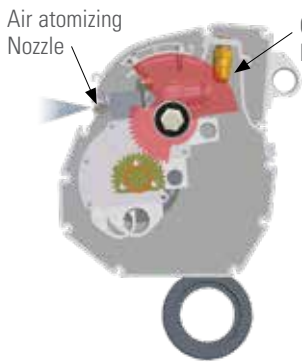
- Eliminate overspray and waste of costly chemicals
- Achieve precision spray control (PSC) when used with a wide range of AutoJet® control panels or modular PSC systems
- PSC involves switching electrically-actuated hydraulic or air atomizing nozzles on and off repeatedly at a controlled rate; pressure remains constant, enabling flow rate changes without changes in spray performance, and application rates remain consistent even when operating conditions, like line speed, change
- Increase your process control by also adding nozzle zoning across the web; change total spray coverage or alter application rate to any zone



SHOWER OPTIONS

**AutoJet Self-Cleaning Web Lamination Shower**

- Minimize waste and scrap. Precise application of foamed adhesives on tissue creates excellent bonding without affecting the drape or softness of the material
- Extends production runs and reduces maintenance downtime – automatically cleans the inside of the header, nozzles, and air lines in place
- More efficient operation means lower operating costs compared to hot-melt and water-based spray systems
- **View the AutoJet® Self-Cleaning Headers video on [spray.com/YouTube](http://spray.com/YouTube)**



**During Normal Operation**

Air atomizing nozzles spray coating solution  
FullJet® full cone nozzles, not in use, are housed behind a shutter



**During The Cleaning Cycle**

At the beginning of the cycle, the header rocks back and the shutter closes  
FullJet nozzles spray directly on the air atomizing nozzles and header and remove buildup

**AutoJet Oscillator Shower Assembly**

- Precise movement ensures continuous and uniform felt cleaning with minimal water usage
- Users can easily and precisely control stroke and speed; settings can be stored or adjusted on-the-fly
- Alarm messages display if the controller detects operational problems
- Operating parameters can be pre-programmed prior to delivery to further simplify set-up
- Durable construction – waterproof design withstands washdown; all wetted parts are constructed of 316 stainless steel
- Easy integration into existing lines
- Integral proximity sensors use closed-loop communication to monitor stroke position and provide system protection
- Minimal maintenance



**SHOWER SPECIFICATIONS**

Visit [spray.com/specsheets](http://spray.com/specsheets) to download specification sheets or contact your local spray expert to discuss your application needs.

## SHOWER OPTIONS

**Air Atomizing Shower**

- Headers feature compressed air to spray the most difficult solutions
- Perfect for dry end moisturizing showers, specialty showers, or very low application rates
- Small header segments with consolidated connections drive multiple nozzles from each feed, no more spider webs of tubing
- Built to order for machine widths and mounting arrangements
- Optional zoning of header segments for sheet width changes
- Nozzles can be equipped with clean-out needles to minimize clogging
- Optional stainless steel enclosure protects nozzles and air and liquid lines; cover is hinged to provide easy access
- Optional mounting assembly permits rotation of the shower

**Pipe-in-Pipe Air Atomizing Shower**

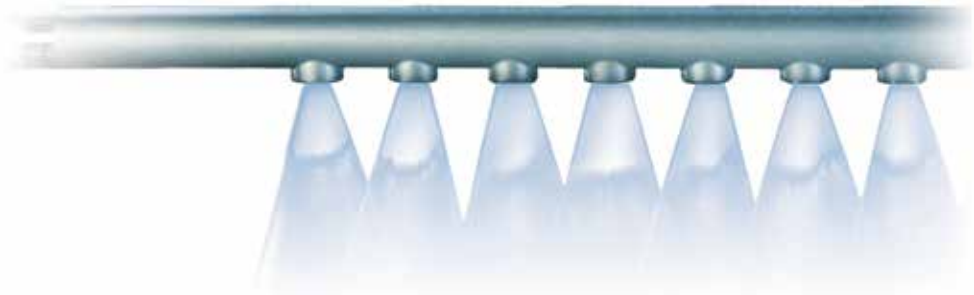
- Protects nozzles from overspray, dirt, dust and accidental damage
- Outer slotted tube encloses a conventional pipe manifold
- Economical alternative to a traditional box-style manifold
- Economical air atomizing shower for difficult-to-spray solutions
- Can also be used with brush or brushless internal showers
- Lightweight for easy installation



## SHOWER OPTIONS

### Brushless Shower

- Designed for use with fresh water and operations where nozzle clogging is unlikely
- For use with self-cleaning nozzles when brushes are not desired
- Economical



## SPRAY CONTROL OPTIONS

A spray controller can be added to any of our showers to optimize spray nozzle performance, lower operating costs and automate operation. More critical operations, such as coating and moisturizing, tend to experience the greatest efficiency and performance gains resulting from precise control of our automatic spray nozzles.

Spray control benefits include:

- Line speed following
- Zone control of nozzles
- Precision application of costly coatings or chemicals to minimize waste
- Separate control of liquid, air and fan air pressure to ensure proper flow rate, spray angle and drop size
- Maximize nozzle cycle times
- Improve troubleshooting of spray performance
- Operator notification or shut-down on specified faults
- Easy integration with existing plant control systems

**For information on controllers, see Automatic and Air Atomizing Spray Nozzles, Cat. 76, section B**



Our AutoJet Spray Controllers range from basic to advanced.

## SHOWER SPECIFICATIONS

Visit [spray.com/specsheets](http://spray.com/specsheets) to download specification sheets or contact your local spray expert to discuss your application needs.

## QUICK REFERENCE GUIDE

Shower Type	Materials of Construction	Nozzle Compatibility	Ideal For
<b>Automatic Brush</b>	Pipe: 304 stainless steel or 316 stainless steel	ShowerJet, plus a wide variety of nozzles	Hard-to-reach brush showers in forming and press sections
<b>PulsaJet® Manifold</b>	Anodized aluminum	PulsaJet automatic spray nozzles	Converting applications and fine control over application rate of expensive chemistries
<b>Web Lamination</b>	Header: Anodized aluminum Wetted components: Anodized aluminum, stainless steel, Viton®, Buna®, nylon, nickel-plated brass	1/8JJAU	Spraying glues for web lamination
<b>AutoJet® Oscillator Shower Assembly</b>	Wetted components: 316 stainless steel Bearings: PTFE	Self-cleaning, ShowerJet, DiscJet® nozzles and more	Upgrading fabric cleaning showers in press and forming sections
<b>Air Atomizing</b>	316 stainless steel	VMAU, VAU, VAA, 1/4JAU with plate mount, AirJet® fogger nozzles	Difficult-to-spray solutions, very low flow rates, or remoisturizing showers
<b>Pipe-in-Pipe Air Atomizing</b>	Pipe: 304 stainless steel or 316 stainless steel	1/8JJAU and 1/4JAU automatic spray nozzles with integrated check valves and strainers	Economical remoisturizing showers
<b>Brushless</b>	Pipe: 304 stainless steel or 316 stainless steel	Self-cleaning, ShowerJet, DiscJet nozzles and more	Entry level chemical or lubrication showers for press and forming section

## SHOWER SPECIFICATIONS

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